

Summary of Underground Storage Tank Overfill Prevention Options
Health & Safety Code (H&SC), Sections 25281.5 and 25291,
CCR, Title 23, Division 3, Chapter 16, Sections 2635 and 2636

Option	<i>Overfill Prevention System</i>		<i>Overfill Prevention Mechanism "Examples"</i>	<i>Product Level</i>	<i>Regulatory Citation CCR, Title 23</i>	<i>Vent/Tank Riser Piping Subject to Corrosion Protection?</i> §2636(b)	<i>Vent/Tank Riser Piping Subject to Secondary Containment⁴? §2636(a)(1)</i>
A	1	Flow restrictor	Ball float ¹	90%	§2635(b)(2)(A)	YES	YES ⁴
	2	External alarm	Audible and visual alarm	90%	§2635(b)(2)(A)	YES	YES ⁴
B		Flow restrictor	Ball float ¹	At least 30 minutes before tank overfills & filled to no more than 95% of tank capacity	§2635(b)(2)(B)	NO ³	NO ⁵
			And External alarm	At least five minutes before tank overfills			
C		Positive shut off valve	Fill tube ² valve (flapper)	95%	§2635(b)(2)(C)	NO ³	NO ⁵
D		Positive shut off valve	Fill tube ² valve (flapper)	Below tank top fittings	§2635(b)(2)(D)	YES	YES ⁴

¹ In order to provide proper flow restriction, a ball float is required under all open risers except the fill riser and automatic tank gauging port.

² If both types of overfill prevention systems (ball float and fill tube valve) are installed, the ball float may interfere with the operation of the fill tube valve if the ball float is installed lower than the fill tube valve. Therefore, the ball float should be installed at a higher level than the fill tube valve so that the fill tube valve is activated prior to any flow restriction.

³ Corrosion protection is not required in this case because the vent/tank riser piping is exempt from the definition of "pipe" pursuant to H&SC §25281.5. However, it is a best management practice to provide corrosion protection for all corrodible piping in contact with the backfill.

⁴ Secondary containment is required at post July 1, 1987 installations because with this type of overfill prevention the components do not meet the exemption criteria of Section 2636 (a)(1), CCR.

⁵ Single-walled components of UST systems may be a source of product or vapor releases to the subsurface environment, even if they do not routinely contain product. Therefore, we recommend installation of secondary containment on all UST components, including those currently exempt from this requirement.